

## Claims

1. An apparatus for generating image data in a computer system,  
5 comprising:

(a) a computer system having a memory, a display, and a user  
input means;

(b) one or more computer programs, performed by the computer,  
for:

10 (i) defining first image data as a first layer, wherein the first  
layer has respective co-ordinates within a three-dimensional volume  
configured with a reference co-ordinate system;

(ii) positioning second image data relative to said first image  
data within said volume by generating a reference pose layer and  
15 configuring the co-ordinates thereof as a second reference co-ordinate  
system within said volume;

(iii) positioning said reference pose layer relative to said first  
layer; and

(iv) upon selecting said second image data, defining said  
20 second image data as said second layer having respective co-  
ordinates within said three-dimensional volume configured with said  
second reference co-ordinate system.

2. A method of generating image data comprising:

25 defining first image data as a first layer, wherein the first layer has  
respective co-ordinates within a three-dimensional volume configured with a  
reference co-ordinate system;

positioning second image data relative to said first image data within  
said volume by generating a reference pose layer and configuring the co-

ordinates thereof as a second reference co-ordinate system within said volume;

positioning said reference pose layer relative to said first layer; and

upon selecting said second image data, defining said second image  
5 data as said second layer having respective co-ordinates within said three-dimensional volume configured with said second reference co-ordinate system.

3. An article of manufacture comprising a program storage  
10 medium readable by a computer and embodying one or more instructions executable by the computer to perform a method for generating image data, the method comprising:

defining first image data as a first layer, wherein the first layer has  
15 respective co-ordinates within a three-dimensional volume configured with a reference co-ordinate system;

positioning second image data relative to said first image data within  
said volume by generating a reference pose layer and configuring the co-ordinates thereof as a second reference co-ordinate system within said volume;

20 positioning said reference pose layer relative to said first layer; and

upon selecting said second image data, defining said second image  
data as said second layer having respective co-ordinates within said three-dimensional volume configured with said second reference co-ordinate  
system.

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